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<u>Uniti</u>	ED STATES PATENT	AND TRADEMARK OFFICE	UNITED STATES DEPAR United States Patent and Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 22. www.uspto.gov	FOR PATENTS
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,722	02/28/2005	Hideki Etori	TAD-C538	8299
	7590 03/20/2007		EXAM	IINER
George A. Loud BACON & THO			BENNETT	, ZAHRA I
Fourth Floor 625 Slaters Land	<u>.</u>		ART UNIT	PAPER NUMBER
Alexandria, VA	=		2875	
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MON	NTHS	03/20/2007	PA	PER

Please find below and/or attached an Office communication concerning this application or proceeding.

.If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)
		10/525,722	ETORI, HIDEKI
	Office Action Summary	Examiner	Art Unit
		Zahra Bennett	2875
Period fo	The MAILING DATE of this communication app r Reply	ears on the cover sheet with the c	orrespondence address
WHIC - Exter after - If NO - Failu Any r	CRTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAISIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin viil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status			
1)🖂	Responsive to communication(s) filed on 26 De	ecember 2006.	
• —-	·	action is non-final.	
3)	Since this application is in condition for allowar	nce except for formal matters, pro	osecution as to the merits is
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.
Dispositi	on of Claims		
4)🖂	Claim(s) 1-3 and 6-18 is/are pending in the app	plication.	
	4a) Of the above claim(s) is/are withdraw	wn from consideration.	
5)	Claim(s) is/are allowed.		
6)⊠	Claim(s) 1-3 and 6-18 is/are rejected.		•
•	Claim(s) is/are objected to.		
8)	Claim(s) are subject to restriction and/o	r election requirement.	
Applicat	ion Papers		
9)[	The specification is objected to by the Examine	er.	•
10)⊠	The drawing(s) filed on 26 December 2006 is/a	ire: a)⊠ accepted or b)⊡ objec	ted to by the Examiner.
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	ee 37 CFR 1.85(a).
	Replacement drawing sheet(s) including the correct	•	
11)	The oath or declaration is objected to by the Ex	caminer. Note the attached Office	e Action or form PTO-152.
Priority :	under 35 U.S.C. § 119		
•	Acknowledgment is made of a claim for foreign  ☐ All b)☐ Some * c)☐ None of:  1.☐ Certified copies of the priority document		a)-(d) or (f).
	2. Certified copies of the priority document		
	3. Copies of the certified copies of the prio application from the International Burea		red in this National Stage
*	See the attached detailed Office action for a list		ed.
	-M-)		
Attachmei	nt(s) ce of References Cited (PTO-892)	4) Interview Summan	v (PTO-413)
2) 🔲 Noti	ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	Date
	rmation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5) Notice of Informal 6) Other:	Patent Application
. ар			

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#### **DETAILED ACTION**

# **Drawings**

The drawings were received on December 26, 2006. These drawings are acceptable.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 6-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Bourdelais et al. (US 6,846,098).

With respect to claim 1, Bourdelais teaches a light control film (Figure 1: 12) having rough surface pattern (22) defining, for each cross-section perpendicular to a base plane (20) of the film, a profile curve along an edge contoured by the rough surface pattern, wherein in any cross section perpendicular to a base plane of the film, the profile curve has an average of absolute values of slope to the base plane (Column 7, lines 7-16 and Column 10, lines 10-20).

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With respect claim 2, Bourdelais teaches a light control film (Figure 1: 12) including a surface layer (22), the surface layer having a rough surface pattern defining, for each cross section perpendicular to a base plane of the film, a profile curve along an edge contoured by the rough surface pattern, the surface layer formed of a material having a refractive index n (Column 12, lines 37-46), wherein for substantially all cross sections perpendicular to a base plane of the film, the profile curve has an average of absolute values of slope to the base plane (Column 7, lines 7-16 and Column 10, lines 10-20).

With respect to claim 3, Bourdelais teaches that difference in the average absolute value of slope between cross sections in different directions (Column 7, lines 7-16 and Column 10, lines 10-20).

Regarding claims 1-3, Bourdelais discloses the claimed except for the degree ranges. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have the claimed degree ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

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With respect to claims 6 and 8, Bourdelais teaches a backlight (Figure 2)

comprising a light control film (12), and a light source (18), wherein the light control film

has a profile curve on a cross section approximately orthogonally crossing a longitudinal

axis of the light source which, divided into segments at a certain interval, has an

average of absolute values of slope calculated for all segments facing the light source

which increases gradually from a cross section in a first direction towards another cross

section in a second direction perpendicular to the first direction or towards the light

source (Figure 1, see Column 5, lines 45-50).

With respect to claim 7, Bourdelais teaches that the slope of the profile curve to

the base plane increases or decreases gradually from one end towards another end of

the film (Figure 1, see Column 5, lines 45-50).

With respect to claim 9, Bourdelais teaches a backlight (Figure 2) comprising a

light control film (12), and a light source (18), wherein the light control film has a profile

curve on a cross section approximately orthogonally crossing a longitudinal axis of the

light source which, divided into segments at a certain interval, has an average of

absolute values of slope calculated for all segments facing the light source which

decreases towards the light source (Column 25, lines 40-44).

With respect to claim 10, Bourdelais teaches a backlight device (Figure 2)

comprising a light guiding plate (2), at least one light source (18) located at an edge

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thereof, the light guiding plate having a light emergent surface (not labeled) approximately orthogonal to the edge, and a light control film (12) located on the light emergent surface of the light guiding plate.

With respect to claim 11, Bourdelais teaches that the light control film (Figure 2: 12) is located so that the one direction is parallel to the one end of the light guiding plate (2) where the light source (18) is located.

With respect to claim 12, Bourdelais teaches a light source (Figure 2), and a light diffusing material (2) between the light source (18) and the light control film (12).

With respect to claim 13. Bourdelais teaches a light guiding plate (Figure 2: 2) equipped with a light source (18) at least on one end and having a light emergent surface almost orthogonally crossing the one end, and a light control film (12) located on the light emergent surface of the light guiding plate.

With respect to claims 14-17, Bourdelais discloses the claimed except for the degree ranges. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have the claimed degree ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

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With respect to claim 18, Bourdelais teaches a light source, wherein the light control film (Figure 1: 12) has a profile curve on a cross section approximately orthogonally crossing a longitudinal axis of the light source (Figure 2: 18) which, divided into segments has an average of absolute values of slope calculated for all segments facing the light source which increases towards the light source (Figure 1, see Column 5, lines 45-50).

# Allowable Subject Matter

Claims 4 and 5 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to show or teach a light control film satisfying formulas 1-4, as claimed.

# Response to Arguments

Applicant's personal interview and arguments, see pages 1-3, filed December 26, 2007, with respect to the rejection(s) of claim(s) 1-13 under 35 U.S.C. 112 and 35 U.S.C 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bourdelais.

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### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cowan et al. (US Patent 6,608,722) and Kaminsky et al. (US Patent 6,898,012) teach a light control film having a rough surface pattern.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zahra Bennett whose telephone number is 571-272-2267. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ZB

Supervisory Patent Examiner Technology Center 2800

#### Applicant(s)/Patent Under Application/Control No. Reexamination 10/525,722 ETORI, HIDEKI Notice of References Cited **Art Unit** Examiner Page 1 of 1 2875 Zahra Bennett **U.S. PATENT DOCUMENTS** Date Document Number Classification Name Country Code-Number-Kind Code MM-YYYY 359/599 08-2003 Cowan et al. US-6,608,722 Α 362/330 \* 01-2005 Bourdelais et al. US-6,846,098 В \* 359/599 US-6,898,012 05-2005 Kaminsky et al. С US-D US-Ε US-F US-G US-Н US-1 US-

#### FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
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#### NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)	
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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